

ABSTRACT OF THE DISCLOSURE

Pharmaceutical compositions and kits useful for the treatment of cancer include certain alkyl esters of cystine and certain alkyl-substituted cystamine derived esters, including, for example, cystine dimethyl ester and a di-alkyl peptidyl cystamine ester, among others. These compounds may be employed in methods of treating cancers or methods of determining sensitivity of certain cancer cells to apoptosis alone, or in combination with other chemotherapeutic, radiological or apoptotic agents.